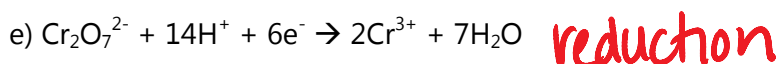
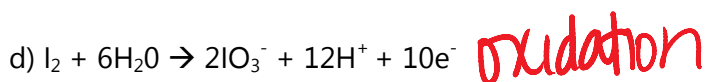
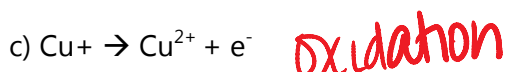
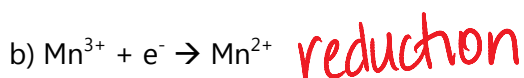
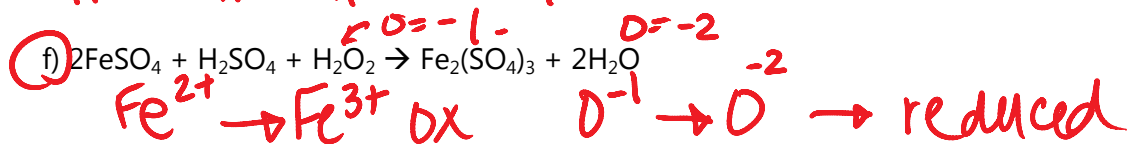
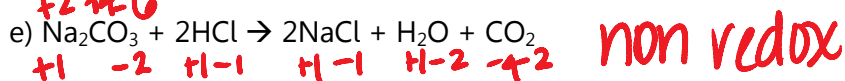
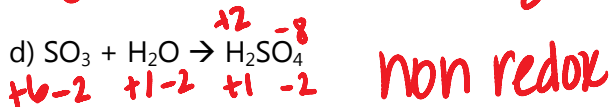
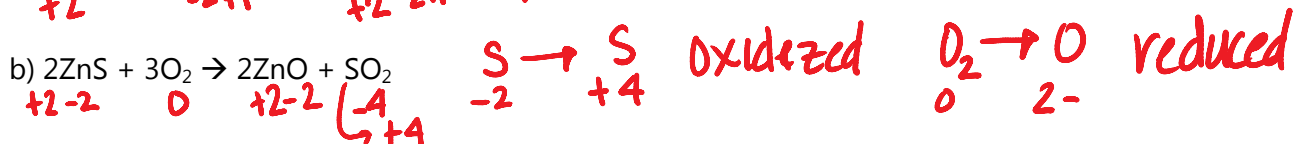
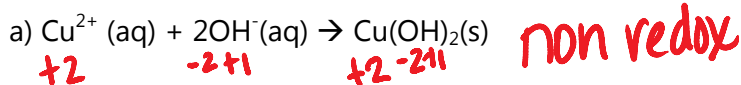


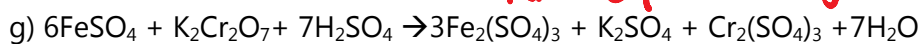
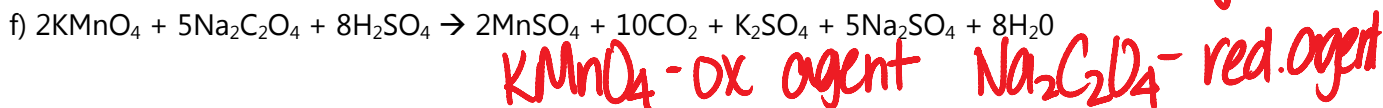
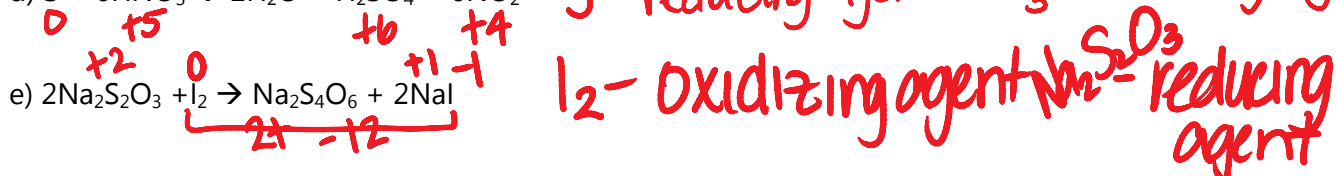
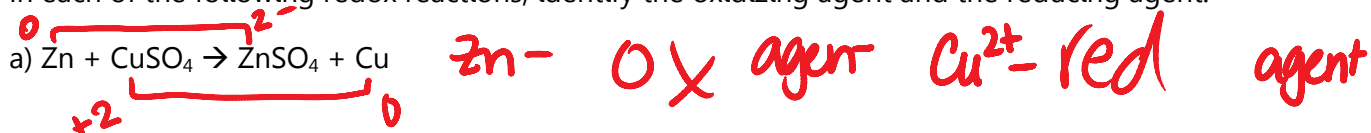
1. State whether the following half equations involve oxidation or reduction:



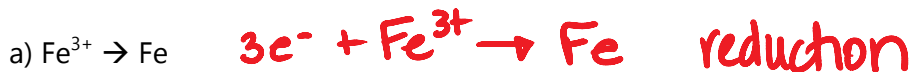
2. State which of the following reactions are redox reactions and, for each redox reaction, identify the element that has been oxidized and the element that has been reduced.



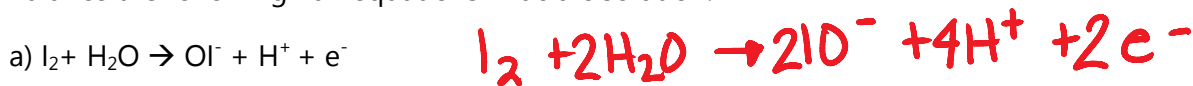
3. In each of the following redox reactions, identify the oxidizing agent and the reducing agent:

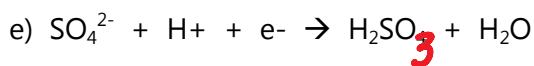


4. Balance the following half equations and identify as oxidation or reductions

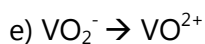
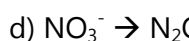
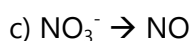
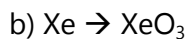
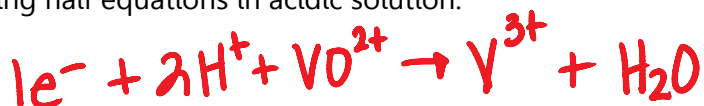
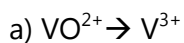


5. Balance the following half equations in acidic solution:

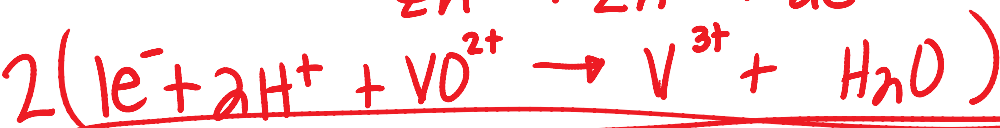
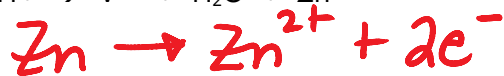
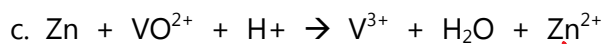
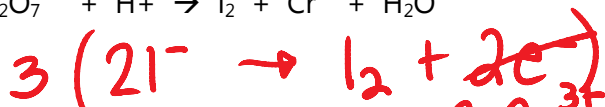
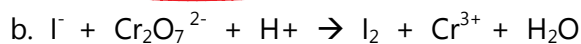
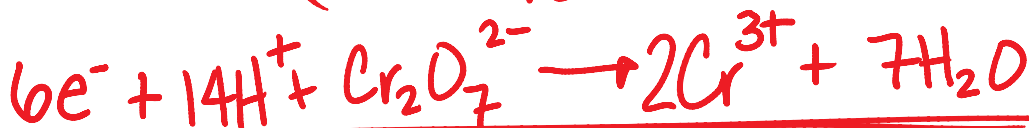
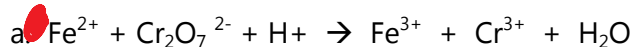


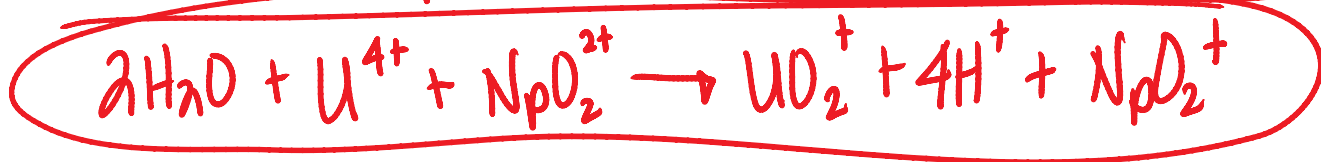
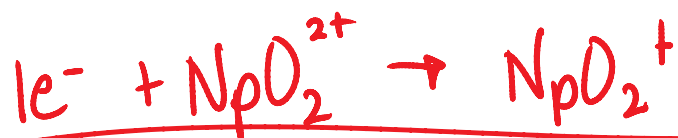
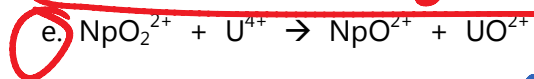
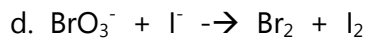


6. Balance the following half equations in acidic solution:



7. Balance the following redox reactions in acidic solution:





Book Pg 166

